

$\Xi_b(5945)^0$ $J^P = \frac{3}{2}^+$

Status: ***

Quantum numbers are based on quark model expectations.

 $\Xi_b(5945)^0$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
5945.5±0.8±2.2	¹ CHATRCHYAN 12s	CMS	$p p$ at 7 TeV, 5.3 fb ⁻¹
¹ CHATRCHYAN 12s measures $m(\Xi_b(5945)^0) - m(\Xi_b^-) - m(\pi^+) = 14.84 \pm 0.74 \pm 0.28$ MeV. We have adjusted the measurement to our best values of $m(\Xi_b^-) = 5791.1 \pm 2.2$ MeV, $m(\pi^+) = 139.57018 \pm 0.00035$ MeV. Our first error is their experiment's error and our second error is the systematic error from using our best values.			

 $\Xi_b(5945)^0$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2.1±1.7	² CHATRCHYAN 12s	CMS	$p p$ at 7 TeV, 5.3 fb ⁻¹
² Systematic uncertainty not evaluated.			

 $\Xi_b(5945)^0$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \Xi_b^- \pi^+$	seen

 $\Xi_b(5945)^0$ BRANCHING RATIOS

$\Gamma(\Xi_b^- \pi^+)/\Gamma_{\text{total}}$	Γ_1/Γ
<u>seen</u>	¹ CHATRCHYAN 12s CMS $p p$ at 7 TeV, 5.3 fb ⁻¹

 $\Xi_b(5945)^0$ REFERENCESCHATRCHYAN 12s PRL 108 252002 S. Chatrchyan *et al.* (CMS Collab.)

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NODE=B161M

NODE=B161M

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NODE=B161W

NODE=B161W

NODE=B161W;LINKAGE=CH

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